

# A bibliography of sources of quantitative data for studies in the economic history of the Scottish churches in the mid-nineteenth century<sup>1</sup>

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**Abstract:** A brief survey of the economic analysis of religion precedes an account of the development of religious institutions in Scotland in the nineteenth century. Sources of data for cliometric analysis of religious behaviour are then considered for the period 1837–1874. The existence of rich data allows an institutional economic account of the interactions between denominations, and throws up a number of research questions to which the available data might well be usefully applied.

## 1. Introduction

This paper complements McCaffrey, 1989, which surveys the wide range of text-based primary and secondary sources useful in social, political and church history of religious behaviour in nineteenth century Scotland. Some commentators, such as Fry, 1987, have argued that there is a need for analysis grounded in economic history, but without explaining how this might augment the existing modes of analysis. The current survey reports on the most readily available quantitative data sources, and shows the scope for cliometric analysis, which is the application of economic theory and statistical inference to historical data, to describe and explain the processes of church growth and inter-

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denominational interaction between the Ten Years' Conflict, 1834–1843, and the start of the Disestablishment Campaign, 1873–1885. To give context to the review of data sources, the paper begins with a brief account of the application of industrial organisation theory to the provision of religious services and characterises changes in the nature of such provision over time as economic processes. This leads into the review of the nature of denominational and official data sources that are available, and how these might be used in statistical analysis. An appendix describes the datasets fully.

The standard definition of the nature and scope of economic analysis is still that of Robbins, 1932: 15, “the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses.” Note that this does not restrict attention to the standard objects of economic analysis, such as companies, but allows for the economic analysis of the behaviour of all entities, so long as they encounter limitations on the resources available. Hence there are well established economic theories of the provision of public goods, private clubs and an emerging interest in the study of social capital, the intangible wealth created through social interactions. (See for example, Bergstrom, 2002, Prescott & Townsend, 2006, Durlauf & Fafchamps, 2004, Glaeser *et al*, 2002, Sobel, 2002)

It is useful to distinguish between institutionalist approaches, in which the environment facing economic actors shapes their actions, in many ways the traditional approach of economic history, and the still emerging field of the economics of religion (e.g. Fogel, 2000, Mokyr, 2002, North, 2005, Iannaccone, 1998, Oslington, 2003). In this latter approach, participation in religious activity may be treated as if it were a purely economic phenomenon, with individuals seeking to maximise their well-being, and churches concerned about generating sufficient surplus to achieve objectives such as membership growth. While informed by these more recent developments, this paper emerges from the largely institutionalist analysis of the denominational behaviour of Scottish churches in the mid-nineteenth century in Mochrie *et al*. 2007a.

Drawing on the structure–conduct–performance paradigm of Bain, 1956, designed to analyse how the economic environment facing an industry determines the behaviour of firms engaged in it, and the resulting outcomes in terms of, for example, profitability and growth, this approach presumes that it is fruitful to treat the provision of the ordinances of religion as the output of an industry, in which each denomination is a separate firm, or company, and adherents, or members, consume these services. We quickly slip past the problems that these assumptions might pose, such as specifying exactly what replaces the assumption of profit maximising behaviour among firms, the complexities inherent in services being provided through local congregations effectively to themselves, and the nature of governance structures, control rights and ownership in various denominations. Adopting the instrumentalism of Friedman, 1953, the test, “By their fruits you shall know them,” (Matt 7: 16) is appropriate. That is, the justification of this approach, operationalised through the specific assumptions discussed more fully below, is not that the assumptions are true in the sense of being accurate descriptions of the structure of denominational churches, but simply that they allow useful insights into their behaviour. Theory is simply a vehicle for predicting regularities in outcomes, and theory is validated if prediction is frequently accurate.

## **2. Modelling churches as economic entities**

In Scotland in the mid-nineteenth century, provision of the ordinances of religion, by which we mean collective, corporate, public Christian worship and associated pastoral services, was typically undertaken by denominationally distinct churches that were Calvinist in doctrine, and Presbyterian in governance. Data about the largest of these churches – the Church of Scotland, the United Secession Church, the Relief Church, the Free Church of Scotland, and, for much of this period, the United Presbyterian Church – is readily available. Smaller Presbyterian denominations, such as the Reformed Presbyterian Church, and the Original Secession Church may be regarded as forming a “competitive fringe” of dissenting churches, alongside other denominations, such as

Baptist and Congregational Unions, the Methodist Church in Scotland, the Scottish Episcopal Church and the Roman Catholic Church.<sup>2</sup> In this survey we restrict attention to the Presbyterian denominations with the largest share of the market for religious services. We now present assumptions about the structure of both demand and supply in this market.

The first assumption is that demand for religious services comes from individuals, or, alternatively, from households. The personal services provided by a church (e.g. public worship, teaching, catechisation, the sacraments, the celebration of marriage, funerals) can be received only through attendance at a church building, or from household visitation. The second assumption is that worship and other services, specifically the ministry of Word and Sacrament, are provided to the whole congregation. There is a public good element to the provision of these services, in that the church offers them to all who are willing to receive them, without charging at the point of consumption. Excludability from, and rivalry in, consumption – typical characteristics of private goods traded in markets – are largely absent from markets for religious services. Consequently, churches have to devise financing mechanisms that ensure their sustainability.<sup>3</sup> The third assumption is that demand is necessarily personal, so there cannot be remote delivery of services. This leads to denominations forming local congregations of adherents, and providing services through these units. Congregations of all denominations enjoyed a certain measure of autonomy, and so it seems reasonable to treat denominations as networks of affiliated congregations, although the nature of the networks varied considerably, even across the larger Presbyterian denominations.

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<sup>2</sup> Numerically the strength of the Roman Catholic Church grew rapidly during the period of our study from a very low base which was geographically highly concentrated. Throughout the period the Scottish Episcopal Church had a greater number of places of worship and fuller national coverage.

<sup>3</sup> In Sawkins and Mochrie, 2007, we show the importance of the design of effective financing mechanisms in explaining the behaviour of the Presbyterian denominations in the nineteenth century.

As explained below, it is of great assistance to cliometric analysis that the civil parish was the primary unit of civil administration throughout the nineteenth century for the whole of Scotland except those urban areas that formed royal or parliamentary burghs. Since the boundaries of civil and religious parishes were largely co-terminous, much official data is available at this level of disaggregation, which, since the parish was typically defined as being an area small enough to support a single congregation, means that it is necessary to consider whether it is reasonable to treat individual parishes as separate markets. In ongoing empirical research, (Mochrie *et al*, 2007a, b) the claim of *Distribution and Statistics of the Churches*, 1886 is accepted. That is, except in burghs, the extent of variety of provision of religious services within parishes and the costs of travel to an adjacent parish to partake of the ordinances of religion were generally sufficient to curtail competition across parish boundaries.

Given the concentration on Presbyterian churches, it is appropriate and convenient to assume that there are no substantial differences in the means of providing the ordinances of religion across denominations. Denominational congregations can then be treated as largely self-managed associations of ministers and adherents. Presbyteries can likewise be treated as local ministerial associations, and church courts, providing supervision to ministers and congregations. Each denomination allowed for the appointment of a minister to a congregation or to a parish. Ministers were required to have completed a period of training, typically provided by the denomination, and to have been licensed by the presbytery with oversight of that congregation.

Ministers were holders of an office, rather than employees of the church, and hence their emoluments took the form of a stipend, rather than a salary, and typically the provision of a house or manse. Especially in the Church of Scotland, other rights, such as the provision of a glebe, augmented the stipend. This may seem to be quite a minor distinction, but it helps to explain the concern of some denominations that ministries should be endowed, so that stipend was paid from the

return on investments, or derived from property rights, without clear scope for monitoring of performance except by fellow ministers.

Collective worship required the erection of a church building. For the established Church of Scotland, funding for new building and maintenance often came from heritable endowments, or government support, but in the other denominations, there was simple reliance on donations.

Thus shearing away a wide range of detail, we may summarise the production of religious services at congregational level as requiring a capital input in the form of the church and manse buildings, and a labour input in the form of ministerial services. Assuming that parishes are a useful unit of organisation, competition between suppliers only takes place between, rather than within, denominations at that level. Such competition is analysed in Mochrie *et al* 2007b.

### *2.1 Developments in church organisation in nineteenth-century Scotland*

This note does not add substantially to the extensive historical accounts of nineteenth-century church behaviour (e.g. Fleming, 1927, Burleigh, 1960, Drummond & Bulloch, 1973, 1975, 1978, Cheyne, 1999) but shows how an economic understanding casts new light on the evolution of church institutions. Throughout the nineteenth century, Scottish society changed substantially, and religious behaviour, and its organisation, adapted to, but also influenced, these wider changes. These changes can be seen especially clearly in the organisation of the Church of Scotland, which throughout the period of study enjoyed established status, and preferential treatment by the British state. Until the General Assembly of 1834, the Church of Scotland did not address fully the impact of urbanisation on its traditional form of organisation, behaving in many ways as if Scotland remained a largely agrarian economy. Its main source of funding was its heritable endowments, based on rights over the produce of, or rental value of, land.<sup>4</sup> The parish

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<sup>4</sup> Arrangements were somewhat different in urban parishes. For example, in Edinburgh, ministers' stipends were funded from the produce of local taxation.

retained a role as the primary unit of government, so that, for example, the Church provided much education and poor relief. The kirk session, the parochial church court, could still assert a right to discipline the population of the parish.

From 1834, the Church sought additional public endowments for a substantial church extension programme. This campaign was led by the most prominent minister within its evangelical party, Thomas Chalmers, who was convener of the Church of Scotland's Committee on Church Extension from 1835 until 1842.<sup>5</sup> In addition to soliciting previously unprecedented private contributions for endowments of church building, the committee sought substantial public funding for the endowment of stipends. For Chalmers, the church, with its ministers visiting every parishioner, and knowing the moral state of every household, was an indispensable partner to the state, guiding the behaviour of all its members. Given these objectives, he believed in the superiority of an established, over a voluntary, church, and in a parochial organisation of spiritual oversight.<sup>6</sup> He also believed that the Church of Scotland was hampered in carrying out this role because its capacity for spiritual oversight had fallen as the population of Scotland had increased, with many changes in its distribution. Chalmers sought the facts necessary to establish the existence of such a deficiency, the better to argue for a substantial public subsidy (perhaps £500,000) for the endowment of new charges. The reports of the Extension Committee to the General Assembly represent the Church of Scotland's case for such support.<sup>7</sup>

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<sup>5</sup> We evaluate the political economy of Thomas Chalmers in Mochrie, 2008. Brown, 1982, is the standard biography, but the essays in Cheyne, 1985, emphasise the width of his interests and his influence on church policy.

<sup>6</sup> Chalmers wrote extensively on political economy. The arguments in favour of a Christian polity are made most cogently in Chalmers, 1825, 1832.

<sup>7</sup> The first of the Reports, Chalmers, 1835, sets out clearly the objectives of the Committee. "What we aim at is not accommodation only, but cheap accommodation – so cheap as to congregate the lower orders in the house of God, not by individuals only, but to congregate them in families. ... We shall never be able to achieve this while the produce of seat-rents forms the only fund out of which to fund the

At the same time as it was seeking financial support from government, the Church adopted other measures, principally the Veto Act, 1834, and the Chapels Act, 1834, that were to lead to a substantial deterioration in the relationship between the Scottish church and the

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clergyman." (p. 5). Recognising that the efforts of the church and its members would not be enough, he continued, "We look to the more powerful hand of a Christian and paternal government," (p. 6) in order to ensure a sufficient endowment of ministerial stipends.

The report also comments on efforts that had been made to inform Scottish MPs of the need for an effective Established Church for the achievement of social objectives, and notes that although all parish ministers had been requested to assist the committee by responding to enquiries, only about 300 returns had been received, and so no statistical information was provided on the need for accommodation.

The second report, Chalmers, 1836, is quite different in tone. By this time, the government had appointed a Royal Commission to enquire into the need for additional church buildings in Scotland. The Committee had therefore prepared detailed submissions for Glasgow, under the direction of William Collins, and for Edinburgh, under the direction of Chalmers himself, but the Commission did not appear to be in any hurry to publish interim reports based on this evidence. Donations to the Church had also declined markedly with the appointment of the Commission, and so Chalmers enjoined the Church to encourage additional giving to the Church's General Fund, securing the right to hold a special collection that year, and to begin a campaign of public meetings.

An appendix to the report contains an account of the construction and endowment of a new parish church in Rothesay, the total cost to the benefactor, the Marquis of Bute, being £6,596. Of this, nearly £4,300 was paid into an endowment fund from which a stipend of £150 per year would be funded from fixed interest investments paying 3½% per annum. This suggests firstly that a public endowment of £500,000 would be sufficient to fund the stipends of one hundred ministers, and secondly that private donations of about half that amount would be required to fund the associated church building programme.

For our purposes, in some ways the most important commentary begins in Chalmers, 1838, where an appendix is included showing the donations to the schemes of the Church of Scotland by congregation. So far as we are aware, this is the only example of the systematic collation of financial data relating to Church of Scotland congregations before the Disruption and will be an important set of benchmark data for studies of changes in congregational activity.



British state. Through these Acts of its General Assembly, the Church of Scotland granted the right to its congregations to refuse a local patron's nomination to a charge, and also asserted its right to form parishes *quoad sacra* without Parliamentary approval, with the ministers of these charges becoming members of church courts, including the General Assembly. It seems reasonable to characterise these Acts as attempts by the Church, along with its campaign for further endowments, to respond to changes in the socio-economic situation of Scotland. By increasing its provision of religious services, the Church hoped to limit the opportunities for entry by other denominations.<sup>8</sup>

The sequel to these decisions, the Ten Years' Conflict, has been the subject of much scholarly analysis. As well as standard church histories, such as Burleigh, 1960 and Drummond and Bulloch, 1975, the impact of the events leading up to the Disruption on Scottish society was such that it receives extensive treatment in more general studies, such as Devine, 1999, Smout, 1986, and Fry, 1987. In addition, Brown & Fry, 1992, is a very useful collection of essays on this period. The conflict arose over questions relating to the limits of ecclesiastical authority. Although the Church of Scotland had sought opinions from the Lord Advocate, Francis Jeffrey, as to the validity of the legislation before it was enacted, a sequence of judgements in the civil courts from 1838 onwards held that the Church's Acts were inconsistent with the Parliamentary legislation establishing it, and so were unlawful. The Church ultimately entered into the Claim of Right, 1842, asserting in terms of the Act of Union, 1707, that its absolute sovereignty in spiritual matters was inalienable (Brown & Fry, 1993: 32). Thus in seeking to improve its own management, the Church ended up in a

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<sup>8</sup> It could also be argued that the legislation constituted an attempt to construct a Church that was more attuned to the aspirations of the evangelical party, since the majority of ministers admitted to church courts through the Chapels Act were considered to adhere to such a theology. Without evangelicals predominating in the Church's supreme court throughout the Ten Years' Conflict, it is unlikely that it would have concluded with schism.

constitutional conflict with the British state, confronting first the judiciary, and ultimately the executive and legislative branches of government.

In the name of the Crown, the Home Secretary, Sir James Graham, rejected the Claim of Right in January 1843. On 20 January, 1843, the House of Lords struck down the Chapels Act, 1834. Secession within the Church of Scotland followed, an event for which the evangelical party had already been planning, with a convocation in Edinburgh in November 1842 drawing in more than three hundred ministers to consult over the practicalities of such a project (Brown & Fry, 1993: 19). The progenitors of the project appear to have believed that the new church would attract such a large proportion of the adherents of the Church of Scotland that the government would be compelled to negotiate with the new body, conceding the freedoms that had been sought in the Ten Years' Conflict. Fleming, 1927 and Brown, 1982, summarise these events very clearly.

The Free Church of Scotland, which emerged from the subsequent Disruption, came close to achieving its objective. At its formation, it attracted 474 out of 1203 ministers of the Church of Scotland, and perhaps half of the Auld Kirk's membership.<sup>9</sup> As shown later, it achieved unprecedented success in acquiring endowments and funding. It ensured that it would be impossible for the Church of Scotland, or any competitor, to claim to be the only truly national church, supported by a majority of church adherents. But on some measures, the Free Church appears always to have been the smaller of the two. The Registrar General's analysis of marriages conducted by ministers of the various denominations show that from 1855 until 1874 Free Church ministers conducted about 22% of weddings, while the share of Church of Scotland ministers was typically 43–45% (Smout, 1986). In terms of economic analysis, as discussed in Sawkins and Mochrie, 2007, the limited penetration of the market for religious services of such a well

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<sup>9</sup> This now seemingly standard formula seems first to have been used in Fleming, 1927.

financed denomination reflects the extent of the barriers to entry enjoyed by the Church of Scotland during this period.

For economic analysis, it is important to remember that while it immediately became the largest competitor to the Church of Scotland in the market for religious services, the Free Church of Scotland was not the first denomination to challenge the National Church. Continuing to restrict attention to Presbyterian denominations, the remnant of the Covenanters formed the Reformed Presbyterian Church in 1690, believing the newly Presbyterian established church to be in partnership with a state that was not subservient to divine law. A further small secession, the formation of the first Associate Presbytery in 1733 created the first voluntarist Presbyterian denomination, which accepted viable congregations into membership wherever they might form, rejecting the desirability of any relationship with the state. Disputes within the Associate Synod led to repeated schism and reconciliation. By 1834, voluntarist Presbyterianism was represented by the United Secession Church and the Relief Church. Partly as a result of the Disruption these two denominations united to form the United Presbyterian Church in 1847. In addition, after many years discussion, the largest part of the Reformed Presbyterian Church entered into union with the Free Church of Scotland in 1876. For economic analysis, during the greater part of the period of study the market for religious services was characterised by a high degree of concentration with strategic interactions arising amongst the three largest denominations as they sought to extend market share. This understanding informs the analysis of Mochrie *et al* 2007b.

### **3. Denominational data**

There is substantial variation in the practices of denominations relating to the collection of quantitative data that might be useful in economic analysis. While many explanations might be given for these differences, the collection and centralised publication of data involves considerable time and expense, and so denominations had to have some reason for wishing to engage in such activity. Towards the end of the period of

study, debate about the extent of market penetration of each of the denominations increased substantially (see Church of Scotland, 1874, Cumming, 1871, Johnston, 1870, 1874, Society for the Liberation of Patronage from State Control, 1870). In this context, the systematic ingathering of data on some measures of membership, participation and giving became highly desirable for all denominations. From 1881 until 1929, the publishing company McNiven and Wallace issued the "Scottish Church and University Almanac," which collated denominational data disaggregated to congregational level. Given the easy availability of this data, this paper concentrates on the more disparate, earlier sources that allow research to extend to the earliest years of the Victorian period.

The data published by the Church of Scotland throughout this period was very limited. There is some information available in the series of "Reports of the Schemes of the Church of Scotland," mainly found in the series of Reports of the Committee on Life and Work, from 1868 onwards. However, these are generally summary statistics for the country and so of limited value for empirical research. In contrast, from its founding, the Free Church of Scotland, which had a highly centralised finance function, undertook the regular publication of extensive data, especially on income and expenditure, disaggregated to congregational level from 1844. The United Presbyterian Church collated congregational returns on membership, activity, and giving from 1850, and began the publication of summaries of these returns disaggregated to presbytery level in 1858. It is to these data sources that we now turn.

### *3.1 Free Church of Scotland: Sustentation Fund and Public Accounts*

Lacking access to the endowments of the Church of Scotland, but aspiring to be a national church, the Free Church of Scotland at its formation faced an immediate problem of attracting sufficient funding to establish a network of congregations, erect buildings and fund ministerial stipends. As well as establishing national and local (congregational) building funds, which were most active in 1843–1844,

it relied on a centralised Sustentation Fund to fund ministerial stipends. In economic terms, the Fund enabled the cross-subsidy of congregations in a deficit position, drawing on the considerable financial resources of the emerging, urban middle classes. This new method of appropriating a share of the wealth created by economic growth and industrialisation was a substantial financial innovation within the context of the provision of religious services in Great Britain. It also required extensive management, supported by the collation of detailed financial statistics on congregations.

The origin, design and operation of the Sustentation Fund are fully described in Buchanan, 1870. This paper, prepared by the then Convenor of the Committee, is supplemented by aggregated time series data on giving within the Free Church. Using anachronistic terminology, this paper outlines the design of the Fund, and the powers of the Sustentation Fund committee to exert pressure on the managers of a congregation to improve financial performance and operational efficiency in providing gospel ordinances.

From 1844, at the end of its first year of operation, the General Assembly of the Free Church received and published a report on the public accounts for the year to 31<sup>st</sup> March. This included an abstract, reporting the income and expenditure of the central organisation of the church, but also a "tabular view of the local building, congregational, sustentation, missionary and educational schemes". This report disaggregated elements of the expenditure of each congregation into those components that were of service to the congregation (the first two) and the wider mission of the church (the last three).

From 1858, the Free Church issued a further "Statement shewing the Ordinary Collections and Seat Rents, Ministers Supplements, Etc. from the Congregations" along with the public accounts. These statements permit the construction of data series for the stipends of ministers of the Free Church, by charge, as well as decomposing congregational income into admission fees, including seat rents, and Christian liberality.

The last series of reports that is of value in conducting quantitative analysis is found in the series "Proceedings and Debates of the General Assembly of the Free Church of Scotland". From 1872, included in the appendices, is a "Statement of Contributions received by the Treasurer for the Sustentation Fund of the Free Church." The value of this report is that as well as listing contributions to the Sustentation Fund by congregation, it also includes membership and adherence data. Similar disaggregated data has not been found for earlier years. For this reason, we believe that the best measure of participation for analytical purposes is likely to be obtained from statistics such as the giving per member of the congregation. This approach is viable because data series on a particular measure of wealth, disaggregated to parish level, exists in the official papers reviewed in Section 4.

### *3.2 United Presbyterian Church: The Committee on General Statistics*

Formed from the union of two denominations, the United Secession Church and the Relief Church, which had never developed a tradition of collecting extensive congregational data, the Synod of the United Presbyterian Church first appointed its Committee on General Statistics in 1850. The Committee immediately began the practice of circulating a schedule of queries to ministers, but early reports to the synod refer to reluctance on the part of many congregations to furnish full answers to many of the questions asked. In 1857, the committee reported that the response rate was so low that it wished to be discharged of its responsibilities, but the synod took the decision to support the activities of the Committee. From 1858 onwards, its reports included an abstract of the returns disaggregated to presbytery level.

The range of data collected by the committee on general statistics is actually wider than the equivalents in the Church of Scotland and the Free Church. It is straightforward to follow trends in membership, attendance, the number of ministers, elders, Sunday School students and the level of support for missionaries, as well as measures of financial performance including congregational income and ministerial stipends. Tables are included in the report allowing a year on year comparison,

all disaggregated to Presbytery level. For the purposes of conducting quantitative analysis, this is probably the minimum required. Obtaining the original returns, on which the published abstracts are based, would be very helpful. However, it is not clear whether any or all of these exist in individual Presbytery records, central records seemingly not being available. Were they to hand, it would be straightforward to undertake a comparative analysis of the economic behaviour of Free Church and United Presbyterian congregations, since Free Church congregations reported on non-financial performance to committees other than the Sustentation Fund Committee.

### *3.3 The Church of Scotland: 1843–1874*

As noted above, such data on the Church of Scotland as appears to be available for the period of the Ten Years' Conflict emerges from the work of the Church Extension Committee. Throughout the period of this study, the best published data relating to the Church of Scotland is found in occasional official papers. The absence of denominational data perhaps reflects the denomination's organisational structure. As the established church, it had access to extensive statutory funding through teinds and levies on heritors, together with an obligation to provide a place of worship and support a public ministry in every parish. The devolution of management to parish level meant that there was no need for the collection of financial data centrally, while the presumption that the Church was a provider of last resort meant that there was less interest in husbanding resources or demonstrating the achievement of market share. To use rather more traditional language, the ecclesiology of the Church of Scotland differed from that of the dissenting churches, and its understanding of membership seems to have been much more inclusive. Certainly, in the debates on disestablishment, a central claim of the dissenters, especially Johnston, 1874, was that the Church of Scotland counted many hundred thousand members who did not participate in the life of the church at all. Add the demoralising effect of the large scale defection to the Free Church at the Disruption in 1843,

and there is no shortage of reasons for the Church of Scotland being slow to collect statistical information on the behaviour of congregations.

An important external driver for change was the coalescing from the late 1860s onwards of voluntarist groups into a united campaign for disestablishment. The Church had rebuffed similar efforts in the past, during the Ten Years' Conflict, for example. An early salvo was Society for the Liberation of Patronage from State Control, 1870, a prize essay that claimed Establishment to be entirely foreign to the history of the Scottish church, and which estimated the number of adherents of the Church of Scotland to be 1.05m. In response, Cumming, 1871, provides an estimate of 1.4m. More importantly, from its formation in 1869, the Reports of the Committee on Life and Work of the Church of Scotland include a series of estimates, based on returns to a series of questionnaires, answered by over 700 ministers. The committee's estimate is similar to Cumming's.

While Johnston, 1874, seemingly using the 1872 committee estimates seeks to cast doubt on some of the published figures and establish the lower estimate of 1.05m., claiming to use data collected privately, it appears that that data was never published or deposited in any public record, and so it is impossible to evaluate the method used. Given its broad comparability with the records of the share of marriages conducted by ministers of the Church of Scotland, the final report in 1874 of the Committee on Life and Work into this matter seems to have been conclusive, confirming that the Church of Scotland still had more members and adherents than its two largest rivals combined.<sup>10</sup> Again, it

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<sup>10</sup> The debate over the membership of the Church of Scotland also related to its access to statutory funding through tithes and levies on heritors. One of the claims made in the disestablishment campaign was that the Church did not use all of the revenue it received from tithes. Were adherence to the Church of Scotland at the lower level, this would have demonstrated (to the satisfaction of the campaigners) its ministers' lassitude and ineffectiveness, and the desirability of granting other denominations access to these funds, the better to evangelise the country. As well as its grounding in theological concerns, the campaign emphasised the role of the



has not yet been possible to establish the existence of the original returns made by parish ministers to the Committee on Life and Work.

The role of the Committee on Life and Work is important because during this period, as well as establishing the number of adherents of the Church of Scotland, it investigated church life more generally. The queries to ministers sought narrative information about, for example, the state of congregations, the activities in which members engaged, and congregations' public ministry. In addition, the establishment of the Committee on Christian Liberality in 1871, whose members secured the Baird bequest of £500,000 in 1872, is a further indication of the Church of Scotland adapting the financial innovations pioneered by the Free Church nearly thirty years earlier. Add to this the continued work of the Committee on Endowments, and it was possible for Principal Tulloch, in co-ordinating the Church of Scotland's response to the Disestablishment campaign, confidently to restate Chalmers' claims about the impossibility of any dissenting denomination being able to minister to the whole population of a city, rather than simply to its members (Cheyne, 1999). By the end of the period of this study, the Church of Scotland, realising the need to counter the claims of the Disestablishment campaign, was beginning to embark on the systematic collection and publication of data on its activities. Similar data to that available in the reports of other denominations was collected together into the relatively accessible form of *The Church of Scotland Yearbook*, published from 1886 onwards, and designed in part to show the relative strength of the Church.

#### 4. Official data

Official data are often the best sources of information on the Church of Scotland during the period covered in this study. The most important are the reports of the Royal Commission on Religious Instruction, 1837–39, and the Census of Great Britain, 1851, which included the

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design of financing mechanisms in promoting efficient outcomes in the market for religious services.

first, and until 2001 the only, attempt to measure religious affiliation. In addition, the radical MP Duncan McLaren secured orders in 1871 and 1874 requiring the Registrar General to enquire of Church of Scotland ministers the number of members in communication in their parishes, and their total stipends.

Much relevant official data do not relate directly to the activities of the churches, but is important for quantitative analysis of religious behaviour. As well as being a unit of church organisation, the parish was the primary unit of civil administration. Hence many official publications record data disaggregated to parish level. This is very useful because it enables investigation of relationships between the degree of religious affiliation and, for example, economic performance.

#### *4.1 The Royal Commission on Religious Instruction etc. 1837–1839*

The Royal Commission on Religious Instruction etc. sat between 1837 and 1839, and was appointed, as noted above, in response to the request by the Church of Scotland, through its Church Extension Committee, for grants of £500,000 to support the erection of new parishes. Unconvinced of the need for such support, the government appointed the Royal Commission to determine whether or not there was a substantial lack of accommodation in church buildings across Scotland. Given its terms of reference, and the decision of the government not to provide such an endowment after the Commission had published only the first three volumes of its reports, the nine volumes are not quite comprehensive. The commissioners were not required to visit those few parishes where the minister reported that there was sufficient accommodation. But in the parishes that were visited, the commissioners sought evidence not just from parish ministers, but from the managers or clergy of all other denominations. Their reports therefore provide data on many of the congregations in Scotland during this period.

The first two volumes of the reports are the most detailed. The first covers enquiries in Edinburgh and Leith, while the second covers those in Glasgow. The narrative of the reports is quite brief, but includes

summaries of income, expenditure and seating for the cities. Appendices contain the very detailed responses of individual ministers and managers to written queries, as well as the verbatim record of evidence taken at hearings. Returns from other presbyteries in Scotland are analysed in volumes 4–8. These contain summary tables, but not verbatim records of evidence. However, queries invited responses relating to revenue and its use, ministerial emoluments and the costs of provision of religious instruction, often only stated in narrative form. Hence there is a mass of both qualitative and quantitative data available, which appears not to have been explored systematically.

The third report analyses the teinds of the Church of Scotland, the heritable endowments over rights to the value of specific quantities of agricultural produce from certain property owners, established in the law of property. While the report itself concentrates upon the nature of these endowments, and the ways in which these rights can be held, once again there is an extensive appendix recording at parish level the gross amounts of royal and other teinds, the manner in which these are held and disposed of, including application to ministerial stipends and appropriations, by, for example, the heritors of the parish, or other parishes. Other appendices to this report analyse the extent to which royal teinds, payable to the Commissioner for Teinds, appear to be unappropriated or not collected. The value of this report is that it states teinds in terms of the quantities of agricultural produce, rather than as a monetary amount. In principle, by collating the prices of agricultural produce set by Fiars' Courts throughout the nineteenth century, this would allow analysis over time of the main source of public support for the Church of Scotland and variation in parochial stipends.<sup>11</sup> The ninth (last) volume of the report is little more than a statistical abstract,

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<sup>11</sup> The existence of substantial unappropriated teinds was very helpful to the government, since it did not wish to make any grant to the Church of Scotland. The Royal Commission's conclusions were inconclusive, and the third report (on teinds) could be used to demonstrate that it was possible for the Church manage its existing endowments more effectively.

containing tables listing by parish the stipends paid to ministers and other emoluments, seat rents and collections.

The importance of these reports lies in their accumulation of both quantitative and qualitative data collected on a remarkably uniform basis. For the cities of Edinburgh and Glasgow, there are generally competing estimates of adherence to individual congregations (one from the minister of the Established Church of the parish, and one from the managers of dissenting congregations). For every congregation that completed a return, there is a detailed account of congregational activity. Such data might usefully be combined with data extracted from "The New Statistical Account", 1834–1845, which includes extensive narrative accounts of the state of Scottish society, as well as the churches, disaggregated to the level of the parish.

#### *4.2 The Census of Great Britain, 1851*

The proposal that questions about participation in religious activity should be included in the Census of 1851 caused considerable political controversy, both in England and Scotland. Sensitive to the threat of disestablishment, the Church of Scotland was very reluctant to permit any questions to be put – or at least any responses to be published – that would enable the Free Church and United Presbyterians to claim that public endowment of the Church of Scotland could not be justified. So close to the Disruption, morale in the Church of Scotland remained very low, and there seems to be little doubt from the available data that its concerns were reasonable.

The Church of Scotland managed to obtain the following concessions. Firstly, in Scotland, ministers or managers of congregations would be asked to complete a voluntary return recording attendance at church services on Sunday 31 March, 1851. That is, unlike the main return, failure to complete a return was not an offence in law. Secondly, publication of data was to be limited to returns consolidated to county level, rather than individual parishes. As a result, the response rate was about 75%, and so the Census reports include estimates that attempt to compensate for the missing data.

The queries submitted to ministers asked them to state the number of seats available to the congregation, once again allowing investigation of need for accommodation, and also the number of people in attendance at services in the morning, afternoon and evening. Even at county level, the returns suggest that the excess of accommodation in the Church of Scotland was considerably greater than in the other denominations. However, excess capacity seems to have been typical of all denominations, suggesting that the Free Church, only eight years after its formation, had already over-invested in the "plant", i.e. number of buildings, required for the provision of religious services.

Similar queries were also addressed to the headmasters of schools. These returns are potentially even more important because they are the best measure that we have been able to find of the relative sizes of the church and parochial school sectors in Scotland. They demonstrate clearly that the Free Church of Scotland, in seeking to mimic the behaviour of the established church, had not simply erected several hundred places of worship, but was also undertaking the education of nearly as many children as the Church of Scotland. Withrington, 1993, notes that in many cases, the Free Church appears to have taken over the management of existing private schools. The queries to school masters included questions on the income and expenditure of schools, the number and quality of the teaching staff, and the range and depth of the subjects for study, and so there is again very rich data here. Data extracted from the Royal Commission and the New Statistical Account therefore enable a quantitative analysis of the evolution of church involvement in education across the 1840s.

#### 4.3 *The McLaren questions*

These returns to the House of Commons list by county the number of male and female communicants on the roll of each charge, classifying charges as parish churches, town churches, parishes *quoad sacra*, and chapels of ease. They also list, by county and parish, ministers' stipends derived from teinds, and other sources. McLaren, as a long-standing supporter of disestablishment, had his own purposes in seeking this

information. One claim of the disestablishment campaign was that the Church of Scotland lacked the vitality to use its endowments effectively, and so these should be available to all churches. The relatively small number of communicant members of the establishment could then be used to demonstrate that the Church of Scotland had no valid claim to be the national church.

#### *4.4 Other public records*

It has been possible to obtain some useful public records collated at parish level during this period. Firstly, the published records of the Censuses of Population are disaggregated to parish level. This allows the calculation of population growth over the period 1801–1881 in quantitative analysis. With the population of Scotland increasing from 1.8m to 3.7m over this time, but with largely agricultural counties' populations remaining constant, the population distribution changed considerably, and this is likely to have considerable explanatory power in explaining the economic behaviour of churches at parish level throughout the nineteenth century.

Secondly, the principal means of financing local services, such as poor relief and parochial schools, was through property taxes. From 1855, the Registrar General was required to collate an annual statement of rateable property valuations, disaggregated to parish level. The preparation of this return proved to be extremely time consuming, and so published data is available only on a septennial basis. Nonetheless, these returns provide us with an estimate of the total wealth of the parish population, or, perhaps more usefully, estimates of wealth per capita. If contribution per member is taken to be a measure of the extent of participation in congregational life, parochial wealth may usefully explain some of variation in the observed data.

Lastly, the Registrar General was also required to conduct an annual analysis of marriages conducted by ministers of the various denominations. While the published data relate to the total number of marriages conducted in Scotland, this series is already widely

recognised as a useful measure of changes in the pattern of religious affiliation of the whole population.

### **5. An economic approach to data analysis**

Simplifying somewhat, the emerging field of the economic analysis of religion may be characterised by the single hypothesis that participation in religious activity increases with competition in the supply of religious services. It is perhaps not surprising that this field has emerged largely in North America, where participation in religious activity continues at levels that are very high in comparison to those found in most of Western Europe. However, it may be that there are substantial differences in the understanding of the role of the church in society between North American and European scholars. The North American literature frequently includes a subsidiary claim, often supposed to be rooted in Smith, 1776, that a "state" church, which may be defined in such a way as to include any established church that has preferential access to certain statutory sources of funding, tends to exert less effort in providing religious services, and so is both wasteful and ineffective. It is not clear from the data sources available that this characterisation is helpful in understanding the market for religious services in nineteenth century Scotland.

The period 1834–1874 began with the near-collapse of the relationship between the established church and the state. The formation of the Free Church and the United Presbyterian Church represented entry on a scale sufficient to challenge the claim of the Church of Scotland to be the only national church. This led to the emergence of an oligopolistic market for religious services in Scotland throughout the remainder of the nineteenth century, possibly with extensive competition for market share throughout the period of study. The failure of the Free Church to obtain its objective of becoming a truly national church, and the apparent resurgence of the Church of Scotland as it began to adopt some of the innovations of its competitor, indicate just how complicated the relation between incumbent and entrants might be. In this period, a natural experiment in the operation of national and

local religious markets takes place. The quality of the data available as a result of that experiment is exceptionally high. The apparent outcomes run counter to existing theory, and so deserve further scrutiny.

Initial research (Mochrie *et al.*, 2007a, b, Sawkins & Mochrie 2007) suggests that there is no strong evidence for increased competition leading to increased religious participation in Scotland. There seems to be no evidence of the Church of Scotland using its public funding to deter the entry of competitors. It was unwilling to relinquish its network of parish buildings even in those areas of Scotland where ministers and the vast bulk of the population “went out” in the Disruption. Its unwillingness to negotiate away its existing privileges was amplified by Parliamentary legislation passed after 1843 that enabled it to respond more rapidly to the need for the erection of new religious parishes in response to population change. Where the Church of Scotland did not face local competition at parish level, the population density (and hence the number of potential dissenters) was sufficiently low that it was not possible to sustain a second congregation. One possible conclusion is that the Church of Scotland used its public funding largely to maintain a public service obligation and ensure the availability of the ordinances of religion across the whole country.

### *5.1 Social capital theory*

Beyond the economics of religion, there are many interesting questions about the role of institutions in economic development. The interest in the development of “civil society” is the equivalent in sociology. These two approaches are brought together in the literature on social capital, and the well-known claim of Putnam, 2001, that about half of the social capital in the USA is generated within churches and faith-based organisations. There are many difficulties with social capital theory, not the least of which is the problem of definition. The term emerges from the Beckerian approach to individual decision making (Becker, 1996), and in that tradition can be understood as a correlate of human capital, where there are spillover effects from capital formation. Within



churches, such activities as teaching on giving, homelessness charities, and mission can all be seen to develop social capital.

An alternative definition builds on network theory, following Granovetter (Granovetter & Swedberg, 1992) in distinguishing between the impacts of strong and weak ties. For Putnam, these become bonding and bridging social capital, where bonding capital strengthens within group linkages, and bridging capital makes it easier for group members to engage in relationships with people who are not members. In economic terms, bonding capital is likely to increase transactions costs, support rent-seeking activity, and limit economic growth, while bridging capital would lower transactions costs, support market-oriented activity, and foster economic growth. There is an argument that Scotland only managed to embark on sustained economic growth in the eighteenth century when the churches came to view their role as being less to ensure conformity and provide social control, and more to promote the moral growth of their adherents. Viner, 1978, makes this argument in the context of the activity of the Church throughout Western Europe.

An established church, especially as conceived by Chalmers, 1825, as a religious magistracy, is structured to foster the development of social capital through parish visitation, catechisation, general education, study of the Scriptures, family devotions, and poor relief. The existence of official data disaggregated to parish level across a range of possible input and outcome variables may allow us to explore in detail the relationship between social capital formation of different types and measures of economic and social well-being. For example, it should be possible to estimate the relation between particular forms of social capital formation and economic growth, using variation in capital formation rates across Scottish parishes. We believe that such analysis will be necessary in developing a comprehensive economic history of the Disruption.

## 6. Conclusions

The churches in Scotland faced in the mid-nineteenth century the challenge of responding to large scale social change. During the course of the period of study, the public role of the Church of Scotland was considerably diminished as secular institutions took on many of its traditional roles. The Free Church of Scotland, formed with the intention of restoring many of the privileges of the Church of Scotland probably accelerated that process, and, in spite of its unprecedented use of cross-subsidy to finance stipends, was never able to become a fully national church. By the early 1870s, the majority of Free Church members seem to have accepted the argument for Church disestablishment. An interesting question is whether the strategy of the Free Church immediately after its formation, especially its commitment to provide education in every parish, led to excessive diversion of resources from the provision of the ordinances of religion throughout Scotland.

Churches in the nineteenth century had to struggle with the problems of expansion, rather than, as now, with contracting markets. From an economic perspective, it is perhaps surprising that the Church of Scotland was able to resist the challenge to its market leadership so effectively. This suggests that there were very considerable barriers to entry in many local markets, seen through investment in excess physical capacity, the training of more ministers than was required, and the reputational advantages of being the universal service provider. Allied with a willingness to adopt some of the methods of the dissenting churches and it seems that the Church of Scotland was able to recover market leadership by the early 1850s.

Perhaps this revitalisation is best seen in the developments of the last quarter of the nineteenth century, when the dissenting churches co-ordinated a campaign for the Disestablishment of the Church of Scotland. The Established Church defended its privileges in a quite unprecedented way (see Cheyne, 1999), with work by the Committee on Christian Life and Work, and the Committee on Christian Liberality in the 1870s being undertaken in anticipation of criticism of the Church of

Scotland during the public debates of the 1880s. Regular collection and publication of data relating to membership and giving, disaggregated to parish level, was an important defence of its position simply because it confirmed its market leadership.

*Heriot-Watt University*

## Appendix 1

### Quantitative and qualitative data sources for study of religious activity in Scotland, 1843–1874

#### 1. Church of Scotland

##### A *Parliamentary Returns*

Communicants 1874 (239) LI.117 and 1874 (239–1.) LI.145

Lists by county number of male and female communicants on the roll of each charge, classifying charges as parish churches, town churches, parishes *quoad sacra*, and chapels of ease. Includes abstract giving county totals and table of *errata*.

Ministers' Stipends 1874 (401.) LI.871 and 1875 (437.) LVII.469

Lists by county and parish ministers' stipends derived from teinds, and other sources.

##### B *Church Reports*

Church of Scotland. 1874. "Reports on the Schemes of the Church of Scotland for the year 1874." Edinburgh. William Blackwood and Sons.

"Report of Committee on Christian Life and Work": Contains useful data on attendance rates for Church and narrative on ministers' responses to queries on the need for church extension.

Committee on Christian Life and Work. 1886 *et seq.* "Year-Book of the Church of Scotland with Almanac." Edinburgh. Church of Scotland.

Listing of Parishes, incumbents, date of ordination, communicants, Christian Liberty, and parish population. Fiars Prices. Data on communicants from Report of the Committee on Presbyterial Superintendence. Data on Christian Liberty from General Assembly's committee.

## 2. Free Church of Scotland

General Assembly of the Free Church of Scotland. 1854 *et seq.*  
 "Eleventh Report on the Public Accounts of the Free Church of Scotland for the year ended 31 March 1854." Edinburgh. J.A. Ballantyne.

Abstract of public accounts and tabular view of the local building, congregational, sustentation, missionary and educational schemes from 31 March, 1853 to 31 March, 1854.

General Assembly of the Free Church of Scotland. 1864 *et seq.*  
 "Twenty-first Report on the Public Accounts of the Free Church of Scotland for the year ended 31 March 1864." Edinburgh. Ballantyne and Co.

Includes Statement shewing the Ordinary collections and seat rents, ministers supplements, etc. from the Congregations (etc.)

General Assembly of the Free Church of Scotland. 1872 *et seq.*  
 "Proceedings and Debates of the General Assembly of the Free Church of Scotland." Edinburgh. Ballantyne & Co.

"Appendix I-E: Statement of Contributions received by the Treasurer for the Sustentation Fund of the Free Church."

A listing of contributions to the Sustentation Fund by parish and includes membership and adherence data.

## 3. United Presbyterian Church

United Presbyterian Church. 1858 *et seq.* "Proceedings of the Synod of the United Presbyterian Church volume second, 1857-63." Glasgow. Dunn & Wright

Appendix X – Report on Statistics

Analysis of the financial position of the Synod, disaggregated to Presbytery level. The most useful tables show membership and income received for all purposes and an Abstract by Presbytery of congregational activity.

#### 4. All denominations combined

##### A *Reports of the Royal Commission on Religious Instruction*

First Report (Edinburgh) 1837 [31.] XXI.9

Second Report (Glasgow) 1837–38 [109.] XXXII.1;

Third Report (Teinds) 1837–38 [113.] XXXIII.1;

Fourth Report (North West Scotland) 1837–38 [122.] XXXIII.273

Fifth Report 1839 [152.] XXIII.1;

Sixth Report 1839 [153.] XXIV.1;

Seventh Report 1839 [154.] XXV.1;

Eighth Report (West of Scotland) 1839 [162.] XXVI.1;

Ninth Report (Stipends) 1839 [164.] XXVI.607

First and Second reports: Extended narrative including 31 tables. Include summaries of income, expenditure, and seating. Disaggregated to level of parish and dissenting congregations.

Appendix 1 – Schedule of queries

Appendix 2 – Digest of evidence (by parish and congregation)

Appendix 3 – Verbatim record of evidence obtained at hearings.

Third report: Report includes definition of teinds and the ways in which rights to these can be held.

Appendix 1: gross amount of royal and other teinds, with manner in which these are held and disposed of, including application to stipends and appropriations.

Other appendices are of royal teinds that appear to be unappropriated or not collected.

Fourth through Eighth reports.

Report (approx 15. pp). Summary of findings incl. 2 tables. Table 2 is very useful with most of the quantitative information collated from queries. Appendix 1: Digest of evidence by parish or dissenting congregation. Summary statements on

revenues (Q7), applications (Q8 – generally text response only), emoluments (Q9) and religious instruction (Q10, largely concerned with capital costs).

Appendix 2: Payments from Royal Bounty in support of ministry etc.

Ninth report (Endowments and stipends)

Report (4 pp)

Appendix 1: Queries to parochial clergy

Appendix 2: Listing by parish of stipends and other emoluments; seat rents and collections.

## **B *Census of Population, 1851***

House of Commons. 1854. Religious Worship and Education (Scotland) Report and Tables. 1854[1764.]LIX.301.

Report (8 pages) and 18 tables.

### *1. Religion*

Tables A and B. Data at county and denominational level. Religious data includes buildings and sittings, attendants (on 30.3.1851), places open and sittings available, period building erected. Approximately 25% of returns are missing or defective. Estimates made for national coverage rectifying this.

Education data includes much detail on the extent of church involvement with secular education, and also Sabbath Schools. Data includes numbers of schools, scholars and teachers disaggregated by branch of learning and age distribution of scholars, total remuneration of teachers, age and income of establishments.

Supplement I states number of places of worship known to exist, for which no return was made.

Supplement II states the estimates (including defective and missing returns) of total places of worship, sittings and attenders.

## 2. *Education*

Tables B, M, N and O relate to Sabbath Schools.

Tables A, D, E, F, G, I relate to various classes of day schools, classified by ownership, and so permit an estimate of the role of the churches in education.

Tables O and P relate to schools by county of both types.

Data coverage includes summaries of number of schools, scholars registered and attending, pupils and teachers in various disciplines, teachers' remuneration, date of establishment of institution and age distribution of scholars.

By county, there are summary statistics of income of schools.

## C *Other sources*

(No author). 1886. "The Scottish Church and University Almanac." Edinburgh. MacNiven and Wallace.

Summary statistics for the largest denominations, 1885. By congregation, lists incumbents, date of ordination, members (incl. adherents for Free Church), stipend (for Free Church and United Presbyterian Church) and income.

(No author) 1886. "The Distribution and Statistics of the Scottish Churches." Edinburgh. MacNiven and Wallace.

Listing by Church of Scotland parish and burghs of population, Church of Scotland, Free Church, UP and Episcopal congregations, members, adherents and contributions, together with numbers of Roman Catholic, Congregationalist, EU, Baptist, Reformed Presbyterian, Methodist, and Original Seceder congregations.

## 5. **Population**

House of Commons, 1882. Ninth Decennial Census of the Population of Scotland (etc). vol I. 1882[c.3320] LXXVI.1

Population Table VIII. Population of Scotland according to Registration Counties and Registration Districts showing the number



of families, houses, population etc. in 1881. Includes summary of each District and particulars including allocation of population to civil parishes within Districts, and comparison of 1881 and 1871 data.

House of Commons, 1883. Population (Scotland) – Return showing the Number of the Population of Scotland at each Decennial Period from 1801 to 1881 inclusive, etc. 1883(161.) LIV.315.

Listing by Parish of population change 1801–1881.

## 6. Valuations

House of Commons. 1874. Return relating to School Boards in Scotland. 1871(403.) LI.759.

Rentals assessments for education by Parish.

House of Commons. 1874. Valuations (Scotland) – Return of the valuation of the several Parishes etc. in Scotland, etc. Edinburgh. Crown Office. 1874 (42.) LVI.1121.

Lists total property valuation for each parish in 1855, 1861, 1867 and 1872.

House of Commons. 1874. Poor Rate etc. (Scotland) 1874(400) LVI.1083.

Return of various rates, including valuation of the several Parishes etc.

House of Commons, 1885, Poor Rate etc. (Scotland) Edinburgh. Crown Office. 1884 - 85(316) LXVII.709.

Continuation of above.

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